

N,N-dimethylcyclohexylamine DMCHA CAS98-94-2 PC-8

Chemical name: [N,N-dimethylcyclohexylamine](#)

Abbreviation: DMCHA

English name: N, N-dimethylcyclohexylamine

CAS: 98-94-2

Chemical formula: C₈H₁₇N

Physical and chemical properties

N,N-dimethylcyclohexylamine is a colorless to pale yellow transparent liquid at room temperature, soluble in alcohol and ether solvents, and insoluble in water. It is a strong basic tertiary amine compound.

Boiling range: 160-165 ° C

Freezing point: -60 ° C

Viscosity (25 ° C): 2mPa.s

Density (25 ° C): 0.85-0.87g/cm³

Refractive index (20 ° C): 1.4541-1.4550

Flash point (closed cup): 40-41 ° C.

The minimum explosion limit (volume fraction) of steam in air is 3.6% and the maximum is 19.0%.

Shanghai Qiguang Industry & Trade Co., Ltd.

Technical Data Sheet

DC PC-8

Description

DC PC-8 is a tertiary amine

used primarily to promote the urethane (polyol-isocyanate) reaction in a wide range of rigid foam applications.

Applications

DC PC-8 is recommended for

evaluation in a broad range of rigid foams.

A major application is insulation foams, including spray, slabstock, board laminate and refrigeration formulations. DC PC-8 is also used in rigid foam furniture frame and decorative parts manufacturing.

It can be batched with the polyol or metered as a separate stream.

Shelf Life:

24 Months

Standard Packaging:

☐ 170KG Steel Drum

☐ IBC Drum is recommended.

Items Spec

Content☐Wt% 98 min

Moisture ☐Wt% 0.5 max

Typical Properties

Flash Point, °C (PMCC) 43

Viscosity @25 °C mPa*s 1 2

Specific Gravity@25°C(g/cm³) 0.87

Water Solubility Insoluble

Appearance Colorless liquid

Storage Information

Qiguang Group recommends that our catalysts be stored in a dry and cool area under appropriate ventilation conditions. Each container should be closed tightly to avoid contamination with moisture or other negative influences that could change the products' performance in the end use. The optimum storage temperature is between 10 °C and 30° C. Lower and higher storage temperatures are not preferable and should be avoided.

System of law

There are various synthetic routes for N,N-dimethylcyclohexylamine, and depending on the type of the raw material, there are a cyclohexanone method, an N,N-dimethylcyclohexylamine method, a cyclohexylamine method, and a phenol method.

Special and use

The main use of N,N-dimethylcyclohexylamine is as a catalyst for rigid polyurethane foams. It is a low viscosity, medium active amine catalyst used in refrigerators, sheets, sprays, and in-situ filled polyurethane rigid foams.

The catalyst catalyzes both gelation and foaming, provides a relatively balanced catalytic performance for the foaming reaction and gel reaction of the rigid foam, and has a stronger catalyst for the reaction of water and isocyanate (foaming reaction), and The reaction of the polyol plume isocyanate is also moderately catalytic and is a strong initial catalyst for the foaming reaction. In addition to being used for hard foams, it can also be used to mold auxiliary foaming agents such as soft foams and semi-rigid foams. It has stable performance in the composition, great adjustability and long-term storage.

<https://www.siliconeoil.com.cn/nn-dimethylcyclohexylamine-dmcha-cas98-94-2-pc-8/>